

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Edward J. Warhover" <kf9xy@apci.net>
Subject: [1939] 1N1492 Diode
Message-ID: <199608011513.KAA13617@hilly.apci.net>

Pardon the bandwidth, but I am hoping that with all the knowledge on this reflector, someone can guide me in the right direction. I am in need of a 1N1492 Silicon Diode. It is used in a Collins 30-L1 Amp. Does anyone know if it is still manufactured, or what the replacement might be.

Tnx es 73,
Ed KF9XY

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: KC7MES@aol.com
Subject: [1967] 40-9er
Message-ID: <960801173147_169676297@emout14.mail.aol.com>

Hi All!!

I just have a quick couple of questions. Number one is, is there any mods to the 40-9er that increase it's power output to, say, 1 watt? Also, what is the best type of connector to use on you're 40-9er, BNC, UHF or N? Finally, is there any good keyers out there that won't cost me much more than my 40-9er and don't require pre-programmed IC's and such? Thanks and please send replies to KC7MES@AOL.COM.

Robbie, KC7MES
Redmond, WA

"Much ingenuity with a little power is vastly more profitable than much power without ingenuity."

-Arnold Bennett (Modified)

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
Subject: [1948] Advice on Frequency equipment
Message-ID: <3200e308.pandora@pandora.lugs.org.sg>

Hi Gang,

I am thinking of buying a piece of equipment for frequency generation/measurement use. Mainly I intend to use it to help me align my

equipment more accurately. Can I get some advice on which of the following will work best?

1. A 0-150 MHz signal generator. Analog dial.
Should be quite stable but I am not too sure. I would expect this to be used in conjunction with a frequency counter to be more precise. Not sure how fine the adjustment you can make using that knob. May have a fine tuning.
2. 0-100 MHz frequency counter.
3. MFJ's Antenna analyser.
Can generate signals from 0-150 MHz thereabouts but not very stable and tends to drift a lot. That may make it useless for accurate alignment but it does have a frequency counter so you know where you are at least.
4. Autek's Antenna analyser.
This is essentially similar to the MFJ unit. Can be used to set a signal at a desired frequency. Don't know how stable.
5. One of the DDS kits with 0-??? MHz range?
This would be cool because then I can have a stable signal source (I think) with good resolution (1 Hz)

What would you pick if you needed one? Thanks.

73 de 9V1ZV Daniel

--

Daniel Wee | daniel@pandora.lugs.org.sg
9V1ZV | daniel.wee@f516.n600.z6.fidonet.org

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: bachmann@ari.net
Subject: [1971] Aluminum Stock for Antennas
Message-ID: <199608012330.TAA03125@mtolympus.ari.net>

At Dayton, I jotted down an address for an aluminum tubing supplier:

Metal & Cable Corp, Inc.
9241 Ravenna Road, Unit C-10
PO Box 117
Twinsburg, Ohio 44087
phone 216-425-8455

I have no experience with this outfit and I have no price sheet.

Another address of interest is for a supplier of Fiberglas rod and Fiberglas tubing:

Max-Gain Systems, Inc.
221 Greencrest Court
Marietta, GA 30068-3825
phone 770-973-6251

In addition to no personal connection or enrichment from these outfits, I have never bought or used their products.

73, Rich Bachmann, N3SLR

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: KI6SN@aol.com
Subject: [1974] An invitation: ARS' "TFR Challenge"
Message-ID: <960801202738_447481034@emout10.mail.aol.com>

ANNOUNCING ARS' "TFR CHALLENGE"

Sparked in part by a knotty operating problem experienced by veteran QRP'er Mike Herr, WA6ARA, on a recent week-long human-powered canoe trip, the Adventure Radio Society is issuing a design challenge in search of the optimum "trail friendly radio," or TFR.

As much as he enjoys operating from the wilderness using a NorCal-40, Herr (ARS No. 95) found use of the radio's front panel controls a pain in the neck -- literally -- when operating at ground-zero from camp.

It points out a hard fact of QRP life: With very few exceptions, QRP designers model their radios with the armchair-seated operator in mind.

So, we're planting the seeds of ARS' "TFR Challenge."

It focuses on the need for radio packaging that meets the requirements for portability, ruggedness, practicality and ease of operation that trail conditions demand.

The challenge is open to all QRP'ers, calling especially upon the collective experience and expertise of ARS' almost 150 members in 34 states, Canada, Europe and Australia to come up with innovative packaging ideas to advance and improve wilderness operation.

CATALYST FOR A CHALLENGE

When operating in the field, experience has taught us that main

operating controls are most easily accessible from a plane parallel to the ground. For example, if both you and your transceiver are sitting on terra firma, conventionally mounted front-panel controls can be awkward and tiring to operate. Put those controls on the radio's top surface, though, and it's a different story.

Think of it this way: In the case of the popular NorCal-40 transceiver, RF gain, VFO, and RIT potentiometers and its RIT on-off switch are on the rig's front panel. Imagine those controls protruding from the rig's top cover, on a horizontal plane, instead. Would the rig be easier to operate when you're sitting on the ground and the rig is in your lap or on the ground beside you? You bet. That's an example of a feature specially suited for a "trail friendly radio."

A COUPLE OF POSSIBLE OPTIONS:

Here are two broad areas TFR challengers may want to consider.

- repackage an existing transceiver in a way that will make it excellent for use on the trail.

- design a radio from the ground up using trail-friendly technology and packaging.

THE "TFR" PANORAMA:

Is it necessary that ALL controls and connections -- headphone, key, power and antenna jacks -- be on that horizontal plane? Experiment and let us know.

What about waterproofing and dust covers? Should the radio float? Are sharp corners a problem? Can antenna tuning units, keys, keyers, batteries, speakers and other accessories be practically packaged with a transceiver to form a "complete station" lightweight TFR design? You decide.

It's just these kinds of questions we hope TFR challengers will help to answer. Necessity, we trust, is truly the mother of invention.

One other important consideration: Out on the trail you don't usually have a table or any other handy flat surface from which to operate. Most fallen trees and rocks are OK in a pinch but can become pretty uncomfortable after more than a few minutes on the air. Most trail veterans have discovered what every Yuppie killing time in an airport has already figured out -- the only truly portable, relatively flat, accessible working surface is your lap. Will your TFR design achieve "lapability?" It's certainly an admirable goal.

Requisites for the TFR Challenge are simple and few:

- The TFR Challenge is open to all QRPers.

- We encourage participants to develop trail-friendly designs in the spirit of ARS, with emphasis on the apparatus' size, power consumption, weight, and practicality for regular, reliable use and portability in the field.

- A written description of the radio -- including details of its physical design, operating characteristics and the challenger's philosophy of development -- must be submitted by TFR Challenge participants to ARS for

review, dissemination and posting on ARS site on the worldwide web.

- A photograph of the finished product must be submitted for review, dissemination and posting on ARS' site on the worldwide web.

- A photograph of the operator using the finished product on the trail must be submitted for review, dissemination and posting on ARS site on the worldwide web.

- Written descriptions should be submitted via U.S. Postal Service or e-mail (KI6SN@aol.com).

- Photographs (and descriptions for those without e-mail) should be mailed to: Richard Fisher, KI6SN, 1940 Wetherly St., Riverside, CA 92506. Color prints, slides, or black and white prints are all acceptable.

- Deadline for descriptions and photographs is Nov. 1, 1996.

ARS' WAY OF SAYING "THANKS!"

Every ARS member taking the society's challenge and meeting its criteria will be awarded a "TFR Challenge" certificate.

Special certificates will be awarded to amateurs -- both ARS members and non-members -- whose designs are particularly innovative after review by ARS founders Russ Carpenter, AA7QU, and Wayne Burdick, N6KR. ARS member Mike Herr, WA6ARA, will also participate in the review process.

Every ARS member who takes the "TFR Challenge" will be eligible for several items to be given away in random drawings:

- An Oak Hills Research "Explorer II" 40-meter QRP transceiver kit

- A QRP Club of New England "NE 30-40" 30-meter transceiver kit

- A Wilderness Radio "KC-1" displayless frequency counter and memory keyer kit

- Two Radio Shack audio "Power Amplifier Module" kits

WHAT IS THE ADVENTURE RADIO SOCIETY?

If you're interested in learning more about the Adventure Radio Society, or would like to become a member (which is free), send the following information to Richard Fisher, KI6SN via e-mail: KI6SN@aol.com

- Your full name

- Callsign

- Postal mailing address

- E-mail address

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996

From: "rohre" <rohre@arlut.utexas.edu>

Subject: [1979] Austin Summerfest QRP,sessions

Message-ID: <n1373187489.41126@msmailgw1.arlut.utexas.edu>

It's here! Time for the ham convention with the QRP forum, Aug. 2,3,4, at the newly named Austin Omni Southpark hotel, Ben White Blvd. and I 35 on the SE corner, Austin TX. (Last year known as the Wyndam).

Sat. at 3:30 PM is the QRP Forum, leading off with Chuck Adams K5FO, Ed N5EM (building a transceiver during the session), and MXM Industries Bruce Williams WA6IVC with his simple Transceiver and Emergiceiver kits, and speaking on "QRP from the ridiculous to the sublime" There will be some history covered here, so if you do not have Ade's book, come on down and hear it from one who lived a large portion of the Amateur Radio Industry history, from Gonset, Swan, and other old names right on down to one of the most sensitive receivers there is, the MXM Superhet.

Just talked to Bruce today, and he is pouring a new concrete base for his tail gate area vertical dipoles, and that area is where you will find Bruce before the indoor forum. If you are looking for a portable QRP antenna that does not need one of Nature's supports, take a look at what Bruce does with ham sticks.

Since he spends his time kitting up kits, and not here on the list, I thought I would give you a little teaser on him to encourage you to our forum. We all know Chuck and Ed, and get to share with them here on the list, but you will have to come on down to Austin in person to hear from Bruce! There will be Norcal kits, and the Forty-9'er that Ed builds will be raffled off at the end of the forum.

And there will be at least a consolation prize, very appropriate for this rig! But you gotta come to play. Be sure to pick up your ticket inside the forum room.

The swap meet will open on Fri. evening, after the Registration opens at 5 PM, and closes at 9PM. There is a hospitality room to whenever. Saturday morning the tail gaters and the swap meet inside will be in full swing, with ham dealers as well; and then at more genteel hours, the forums and VE exams will begin.

There will be a DX session, ARRL forum, ARES, something for the non hams, and many events to attract your interest in addition to QRP. This is also the summer meeting of the Texas VHF FM Society, thus repeaters and higher bands will be represented as well. The VHF general meeting is Sunday morning. There is a registration prize and grand prize, and hourly prizes. Saturday evening there will be a Fajita Feed at Dance Across Texas club down the street, followed by the Hospitality Room atop the Hotel, until whenever.

This is also the last weekend of Austin Aqua Festival, so the family can enjoy the music at the side of Town Lake Downtown, in the evening as well.

Will be looking forward to eyeball QSO's with you!

72, Stuart K5KVH

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Brad Mugleston <bmug@gw1.com>
Subject: [1959] Camping
Message-ID: <199608011846.AA09085@gp-ipc103.gw1.com>

Gang,

I will be in the wilds of the rocky mountains this weekend (Friday through Sunday August 2 - 4)(Ya I know its August already - I still haven't finished my Easter candy yet!) My son Derek (KB0SJY) and I will have our Explorer II on 40M novice (no I haven't upgraded yet) with a Dipole and possible Long wire and maybe just a nice tall tree. Friday is a positive and Saturday a maybe.

Put your ears on big daddy around 03:00 8/3 (Zulu) and scan the band. I will be the slow but steady CQ and Derek will be the articulated well executed CQ. We may be on and off all night depending on ghost stories, burning marshmallows and potty breaks.

Its kind of a family reunion - not sure why we all live in the same metropolitan area but Grandma wanted to get everyone together so...

See ya there,

de KB0ROL, Brad
qth Aurora, CO
KB0ROL@JUNO.COM

PS my XYL just called I got a package from Auteck, looks like my analyzer is here. I think I'm coming down with something - best be going home. Don't want to make anyone sick here at work.

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [1956] Chipped a ceramic disc cap, what would you do?
Message-ID: <Pine.3.89.9608011330.B13205-0100000@w3eax.umd.edu>

In typical NF3I fashion, I picked up a Mirage 30 watt 2m amp for my sister & bro-in-law. Upon opening it up, a 15 ohm resistor was still working but its beltline was all discolored (black)...

The PC board is REALLY in the case, so I snipped the leads and tacked a new resistor in its place, attaching it to the remaining posts.

In the process (this is the NF3I-like thing to do) I bumped the Dikes against a ceramic disc cap (small) and chipped a 1/8" piece of it off.

Should I go in and fix it, or should I just leave it alone? It's a pain in the butt to get to the solder side of the board. Should it still work OK? > 90% of the capacitor is still there, and the amp seems to work at full rated output.

P.S. the cap is main transistor's circuit - collector to base

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: Mel Evans <101366.3072@CompuServe.COM>
Subject: [1961] Envision DTP
Message-ID: <960801191713_101366.3072_JHP107-1@CompuServe.COM>

Hi gang,

Here we go again with the flattery! I know this ain't the list for software info, but as I've said before, it IS the most helpful list on the net.

Trying to contact the publishers of "Envision Publisher", a company called Software Vision Corporation originally in Tampa I believe. They had an agent over here in the UK called Transend who also seem to be not contactable. "EVP" is a GUI based desk top publisher that runs under DOS and was distributed in about 1993 in the form of a shareware diskette, with the usual invites to send more money for the FULL super duper all singing version.

I am loath to part with money to a company and address that may or may not exist now. Anyone out there know their whereabouts, or have a registered copy they no longer use and may wish to trade ?

72 and 73 de Mel

GM6JAG
Edinburgh Scotland UK
Home of the last HW9
G-QRP EA-QRP ARRL etc.

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996

From: ke1ex@ids.net (Laurent C. Lafond)
Subject: [1923] FCC e-mail address
Message-ID: <199608010428.AAA81015@nss2.CC.Lehigh.EDU>

Hi Gang -

Don't really know if the person asking about it got it, but here it is again.
I don't remember seeing it on the list, and I didn't record his address.

fccinfo@fcc.gov

That'll get you there. What happens after that is anyone's guess.

73,
Laurent KE1EX

ARRL, Fidelity ARC, NRIRC, OSARG.
QRP-L#591
WAS cfn IL PA VA WV
e-mail - ke1ex@ids.net

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: wb8ygg@juno.com (Bradley S. Mitchell)
Subject: [1970] Freq Multiplier & Group Hug
Message-ID: <19960731.185739.7911.0.WB8YGG@juno.com>

Ok, now that the lab test thing is over.. Group Hug.
On with business.

Where is the article regarding the freq multiplier in QST that uses
cmos inverters in a non switching manner?
I happened to be snooping through someone's documentation
and found this. It was part of the docs that were in a pile of
stuff that someone had for the r2/t2 combo to make a
2 meter oscillator.

I'm not sure if Bill Kelsey put that osc together or kk7b..

Regards, Brad Mitchell WB8YGG

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996

From: wager@juno.com (James W. Cates)
Subject: [1934] Ham-swap Story
Message-ID: <19960801.072533.9590.3.wager@juno.com>

Went to local one. Ham I know selling his Century-21 for \$85. I have owned 14, still have one, digital. I need an analog for the accumulation. I had bought Radio Shack DSP for \$29.95, so did not know how much money in my wallet. Around \$85, plus or minus. I said to Mike, "Tell you what I a'gonna do. Open my wallet and we will count the money; if more than \$85, you keep the extra. If less, hoo-boy, my lucky day, but I will guarantee there is \$75 and if not, I will go home and get it." "No way, Jim, I know YOU!" (where did I get that reputation? Good Grief!). Anyway, I said, "OK, but let's count the money, anyway." So, opened ye olde wallet. Filled mostly with one dollar bills, to buy those goodies for QRP junque box. I had a lot of them. I got up to sixty five and started counting the ones, when, oops!, out popped a fifty dollar bill. Mike yelled "It's a deal." Sorry, Mike, too late. We were both laughing and it was a fun deal for each of us, which is the way a swap should be. Fun deal? Hey, I think he would have taken seventy five; I just outfoxed myself out of ten dollars!!

Moral, if any: (1) have fun (2) you can have too many of anything.
Anything worth doing is worth OVERDOING!

(I hope these simple truths that I hold to be self-evident, do not cause controversy. hi hi).....jim

PS: Latest additions to low power accumulation: Atlas 110TX/RX combo. Dentron 20 meter MXL Mini. I need a 556 Scout and an Argo II (late model), but will have to wait for the prices to come down. Yours has? Oh, goodie!
j.

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: jbenett@ebmud.com
Subject: [1964] Hawaii on 40
Message-ID: <9608012016.AA19730@phantasm>

Greetings! I'm off to Maui for a week's vacation and am taking along my OHR-400 & tuner. Never been to this timeshare place so have no idea what the antenna possibilities may be. If the tree Gods cooperate I hope to be on 40m cw (~7.040?) in the evenings and will look for qrp stations needing Hawaii. Sorry - no hamming during the day - future XYL would kill me! Also, when I get back I'll

let y'all know how the trip through the security facilities are at SF0...

Jim Bennett (jbennett@ebmud.com), N6PDX

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Gary Surrency <gsurrenc@ix.netcom.com>
Subject: [1946] Howard W. Sams PhotoFacts and Radio Shack, WM-1, etc.
Message-ID: <3200DC6D.2A78@ix.netcom.com>

Guys (and Gals),

Sorry about my earlier post that Radio Shack could get SAMS PhotoFact service manuals. I have been informed that R/S stopped this practice about a year ago due to lack of interest and little profit. They DO carry their own service manuals on their own equipment, however as I had earlier posted.

So if you need SAMS literature you'll have to get it from some other electronics distributor. There is usually a parts vendor in your area to keep the radio/TV repairmen supplied, and that is a probable source.

I got my start in ham radio when I was 10 years old by a ham who was a TV repairman in my home town. He was W4SLF, a silent key now, but a dear friend to me for many years. I'm sure some of you have similar stories.

Sorry again for the inaccuracy, and thanks to Charles Cashion for bringing this to my attention. What a great list this is!

obQRP: If you compare how the WM-1 wattmeter is constructed to one made specifically for VHF/UHF, you'll appreciate that it works as high in frequency as it does! Once you go past about 50MHz, ya' really gotta go to stripline techniques to achieve any sort of accuracy. It is a real testimony to the OHR unit that it works up to 54MHz as well as it does. It's one of the best purchases and kits I've ever made. Thanks, OHR.

72/73

--

Gary, AB7MY QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Floyd Soo, KF8AT" <hires@rust.net>
Subject: [1949] Lab Teats
Message-ID: <32010D30.22C8@rust.net>

Keep those Lab Tests coming! It is great information to post to the group. If there are disagreements, so be it! It would be a boring hobby and boring world if we all agreed, all the time! It might stimulate some interesting technical discussions, as opposed to the political and personal junque!

I for one, do not have the access to rigs or test equipment to do any of these tests, so I find the results and the ensuing discussions very informative!

72,
Floyd, KF8AT
QRP-L #392

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: Doug Hendricks <ki6ds@mail.telis.org>
Subject: [1928] Lab test postings
Message-ID: <32004B4F.2E3E@telis.org>

This is an open letter to Paul Harden. Please continue to post the lab test results. I am very appreciative of the time and effort that goes into the posting by everyone on this list. I may not agree with every posting, but I want to see it for myself and make my own decisions. I also want the opportunity to learn, which I have done a lot of from postings on this list. 72, Doug, KI6DS

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [1957] LAB TEST: Cease Fire.
Message-ID: <199608011804.MAA14239@zia.aoc.nrao.edu>

OK all, let's lighten up (including me). I did not intend for this to asborb QRP-L. Thanks for your support. I will continue posting lab tests. These people who design and provide these rigs work hard for the hobby; it was beginning to appear the lab tests were back-firing from their intent. Best solution was to stop doing it to not

inadvertently make any designer or rig look bad.

Wayne's comments contained some very valid points. NUMBER ONE is test results have little value without being properly explained. For example, he confused PA efficiency with overall transmitter efficiency ... because I did not offer a definition.

Doug brought out another fault in lab tests ... in that a sample of ONE needs to be evaluated with GREAT caution. My tests are based on a sample of ONE ... and usually one that someone else built. There could be a solder splash to ground on the IF filter, for all I know.

CHANGES FOR THE FUTURE:

1. I have the means to make good lab tests, because in part, I do it for a living. I also have the means to make hardcopies of oscilloscope and spectrum analyzer displays. All future lab tests will be fully documented via hard copies.
2. Lab tests will be sent to the designers for their review before posting. Any measurement they feel was made in error or does not represent typical performance can be discussed privately and worked out.
3. I am submitting an article to Doug Hendricks for publication in the next QRPP on how to make receiver performance measurements. It is not complete, but another article or two will follow.
4. I'll post the same information on QRP-L ... particularly to accompany lab tests when posted to QRP-L so complete definitions are provided.
5. Final versions of the lab tests will be provided to the NorCal webpage or whoever else wants to carry them for archiving.

For the next FDIIM/NorCal/Dayton building project (\$25 max. limit), a good idea would be a signal generator (VFO) with say a calibrated 1mW output (0dBm) that can be varied +/-10dB, some switchable step attenuators in 10-20dB steps to take it down to say -140dBm, and a metering circuit to show output power (before attenuators). The signal generator could be a crystal oscillator you could bend a bit like Wayne's 49er VFO, calibrated in say 100Hz steps. You'd have about everything you need right there to perform most of these tests yourself, plus have a valuable piece of test equipment for aligning/troubleshooting, and heck, a spare VFO while you're at it. Won't rival Hewlett-Packard, but adequate for basic use. Throw in a 555 timer to modulate the RF at 750Hz and tweak that nebulous "sidetone" while you're at it.

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [1969] LAB TEST: Radio Telescope
Message-ID: <199608012237.QAA24065@zia.aoc.nrao.edu>

Let's lighten up with this. A couple suggested I post how the VLA receivers work.

LAB TEST (Specifications) for
Very Large Baseline Array (VLBA) Radio Telescope

RECEIVERS:

Frequency Coverage: 330/660MHz and 1.5-43GHz in 8 bands
Type Receivers: 330/660MHz - Room temperature GasFet's
1.5-43GHz - HEMP amplifiers (High Electron
mobility transistors) cooled with
liquid helium to 15 degrees K.
Receiver output: -120dBm/Hz
Min. Discernable Signal: $\sim 3 \times 10^{-23}$ uV (at 1.5GHz/20cm)
For astronomy types: about 8mJy
Total system noise: <60 deg. K
1st LO: 2-16 GHz synthesizers, locked to a 100MHz hydrogen maser
Accuracy: +/- 2.5 degrees phase at 16GHz
1st IF: 750MHz, (492-1008MHz) times 4 channels at -67dBm
(2 chan. for left hand polarization, 2 for Right hand)
2nd LO: 100-1000MHz, locked to 100MHz from a hydrogen maser.
Accuracy: 2×10^{-15} (1 second in 3 million years or at 100MHz,
1Hz every 11-12 days)
2nd IF: Baseline, 0-50MHz into LSB+USB times 2 IF's each.
3rd IF: Digitally sampled at 32MHz into 0-16MHz IF's,
consisting of sine, cosine, magnitude & sign for LSB/USB
(If you've lost count, now at 64 IF channels)
IF Bandwidth: 62.5KHz to 16MHz in 12.5KHz tuning steps

TRANSMITTER: The VLBA antennas are strictly passive (receive only)

ANTENNA:

Antenna size: 90 foot dish with subreflector; about 300 tons
Pointing accuracy: <15 arc seconds (in winds <45 mph!)
Half-power beamwidth: 1.5wavelength (at 1.5GHz about 10 arc minutes)

VLBA RECEIVER/ANTENNA LOCATIONS:

Pie Town, NM	North Liberty, IA
Los Alamos, NM	Ft. Davis, TX
Kitt Peak, AZ	Hancock, NH
Owens Valley, CA	St. Croix, USVI

Brewster, WA

Mauna Kea, HI

BASIC OPERATION:

Signals collected on the dish surface are focused into a narrow beam and formed into a very narrow "pencil beam" by the subreflector. Subreflector rotates to squirt pencil-beam RF into proper feedhorn. Feedhorn splits signal into left-hand and right-hand polarization. >From feedhorns, signals enter the refrigerated dewar compartments, which contains receiver/1st mixer components, cooled to 15 deg. K for a very low noise figure. Output from desired receiver is sent down 4 runs of special heliax cable to station building about 200 feet away (now at room temperature). 100MHz and 500MHz reference signals are also sent along this cable and compared on both ends to ensure phase never changes as cables heat and cool. This is called "round trip phase compensation." 1st IF is converted to 0-50MHz "baseband." (Baseband is a fancy word that describes pretty much what the product detector in a QRP rig does ... converts it from zero Hz on up). Baseband converters produce an upper and lower sideband product. This is then sampled at 100 MHz to make it digital, broken into smaller bandwidths by filtering and sampling again at 32MHz then 16MHz (to make 8MHz wide channels). The astronomer decides which information on each channel he wishes to use ... magnitude information, phase information, cross-channel correlation, etc. Magnitude is generally used for measuring the temperature of a celestial object for map making, where the temperature is measured over a wide range of frequencies (called "continuum" mode). The images made from magnitude information emulates an optical photograph. Phase information is used to measure emissions at very specific frequencies. Astronomers use this mode for "spectral line" observing, measuring the presence of hydrogen gas for example. This mode also allows virtually instantaneous determination of speed and distance of the object relative to the earth (by measuring the red shift). Observing an object, this mode is also used to scan the object in frequencies to determine what atomic elements and molecules are present ... such as hydrogen, water vapor, ammonia, etc. This is used to determine the chemical and molecular composition of the object being observed and its evolution. In short, it is a fancy spectrum analyzer (from which images or maps are also made, unique to radio astronomy)

The outputs from all ten VLBA sites are tape recorded on some very special 36 channel high speed recorders, sent to Socorro, NM where they are played back (after some heroic synchronization methods) and correlated together. This is what simulates a single antenna that is thousands of miles across. This produces an effective apperture (resolution) of .001 arc seconds, to yield the most accurate and detailed celestial images on earth.

Maintaining system noise, gain and phase stability is so important,

that calibrator signal sources are inserted into the signal paths at various places every few milliseconds to detect miniscule gain or phase changes. During observing, the antennas are pointed to a nearby "calibrator" source every few minutes to also compensate for changes in the atmosphere (Signal dispersion/phase changes due to water vapor or temperature, for example). On a daily basis, about half our Electronics Department is engaged in keeping the front-end, LO and IF components properly aligned, groomed and calibrated.

I work on the "VLBA Formatters," basically all the digital electronics from the baseband converters and samplers to the cable that plugs into the VLBA recorders. In addition to "formatting" all the IF channels for recording, it also performs real time spectral analysis, phase noise calibration, sin/cos and magnitude "snap shot" correlations, etc. In terms of a QRP receiver ... this would be the detector stage, fancy DSP filters, built in spectrum analyzer, etc.

COST: A bunch more than \$129.

72, Paul NA5N

Radio Astronomy ... our business is looking up.
(Bad in-house joke)

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: amarriot@direct.ca (Albert Daniel Marriott)
Subject: [1960] Locating source for SBL-1
Message-ID: <96Aug1.114520-0700pdt.29553-4697+552@orb.direct.ca>

Hi,

Thanks for all the very quick help on locating this part - much appreciated.

Dan
VE7CTN

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Dan Keen <70731.722@compuserve.com>
Subject: [1926] MFJ is on the WWW where?
Message-ID: <960801050814_70731.722_EHM37-1@CompuServe.COM>

The MFJ rep has posted a message each day for about a week now over on

Compuserve announcing that MFJ is now on the WWW. Unfortunately he has not posted the URL (address) and seems to ignore all questions asking for it.

Anybody found their brandnew page yet?

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: amarriot@direct.ca (Albert Daniel Marriott)
Subject: [1951] Need help locating SBL-1.
Message-ID: <96Aug1.101425-0700pdt.269089-27397+501@aphex.direct.ca>

Hi,

QST Aug/95 issue has an article about a xtal receiver which uses a part I cannot locate: Mini Circuits SBL-1 diode mixer.

Can anyone point me in the right direction for this mixer? Any help would be appreciated, thanks.

Dan
VE7CTN
amarriot@direct.ca

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: wager@juno.com (James W. Cates)
Subject: [1941] OH P00!
Message-ID: <19960801.081528.9590.10.wager@juno.com>

I see a typo in my ham swap story, the admonishment should read "You CAN'T have too many...etc."

Serves me right for trying to post a high-tech message.
(joke).

OK, back to the woodwork, via the woodshed. jim

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [1935] OHR WM-1 at 2m FAILS!!!
Message-ID: <Pine.3.89.9608010932.B12496-01000000@w3eax.umd.edu>

This is not a surprise, really. It's only rated to 54 MHz, which still ain't bad 'cause you can still use it on 6m accurately.

The question was asked last week sometime and I said I'd look into it with mine. I get virtually no deflection on my WM-1 when passing either 200 mW or 2 watts of 146 MHz carrier through my unit.

Sorry! It was worth a try.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Phil Sikes" <psikes@whidbey.net>
Subject: [1924] PACTOR on 14.060
Message-ID: <199608010523.WAA03278@islander.whidbey.net>

Hello to the group. The gents that I heard today on 14.060 running pactor were OM4YL and OK8ECW. If any of you out there know them, maybe a gentle reminder would persuade them to move off just a bit. They were heard abt 20:00 UTC here in Washington State.

72 - Phil
Amateur Radio Station
KJ7NS
ARCI 9196:NWQRP 412:QRP-L 528
email: psikes@whidbey.net

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [1978] PVC cleaning
Message-ID: <9608020215.AA11059@flowserver.stem.com>

Greetings! As our antenna work has, I'm sure, made us all experts in dealing with pvc, I have a question...PVC from the hardware store is ugly...but ugly...all that red and blue writing...those bizarre brown stains...what do you guys use to clean it up? I use it for bird stands as well as antennas and have yet to find a way to make nice shiny pvc...any suggestions?

73 de dave, n9uxu

=====

David J Adams	N9UXU QRP-L #83
dave@flowserver.stem.com	NorCal QRP #1442
(415) 813-5028	Flow Cytometry Specialist

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: mvjf@mvubr.att.com
Subject: [1958] QRP AFD
Message-ID: <199608011846.0AA16139@alig1.att.att.com>

Pete

Here is the QRP Afield rule clarification/definition:
Your question comes up each year.....

How can a club participate in QRP Afield ?

A group or club can operate using one call, but have only one
transmitter on the air at one time.

Can you see the possibilities ? :)

ie....

Many stations/operators stand by ready to transmit.

When one stops transmitting, another starts.

(Need a band-leader for this one :) HI

Or....

3 transmitters can be on the air at one time, using 3 callsigns
and submit 3 log entries.

72 W1FMR

72 Jim W1FMR

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [1953] QRP Rig Evaluations
Message-ID: <M979300.005.gxno5.1.960801165502Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Just a question for the group.

We have several highly qualified (and apparently well equipped) people contributing evaluations of the multitude of QRP rigs available.

Bob Gobrick, V01DRB/WA6ERB, posted comments regarding ARRL's shortcomings in their review of the QRP rigs published recently.

Is there any consensus as to what constitutes a valid test suite for QRP rigs?

Should it be the same as the big-ticket commercial rigs? Should it be customized to reflect the real world intent of at least some of the small rigs, as in low power drain, small size, light weight, singleband, simple, easy to build, etc? Is it possible realistically to come up with a consensus for this?

I thoroughly enjoy reading the evaluations (notice I don't say reviews) because I'm still learning what is important within different frames of reference.

I encourage anyone with the resources and interest to offer their evaluations, as we can all learn from them.

72/73 Bob N6WG

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: lve1@inel.gov (Larry V East)
Subject: [1936] QRP+ 12M Spectrum Measurements?
Message-ID: <2.2.16.19960801145314.34d70990@eloi>

I have been trying for more than a year now to get information from ANYONE who has made 12M spectrum measurements on an "original" (unmodified) Index QRP+! Does ANYONE out there in cyberspace have data that they would be willing to share with me?? I am particularly interested in the relative strengths of the "close in" 12M spurs to compare with my measurement results.

Any input would be greatly appreciated.

72/73, Larry W1HUE/7
LVE1@inel.gov

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Dean Marzocca <n2tnn@ifu.net>
Subject: [1976] QRPP
Message-ID: <320156C3.6ABA@ifu.net>

Looking for someone who has an extra copy of the March '96 issue of QRPP.

Contact me direct with availability and price.

Tnx and 72 de Mike / W8DN
weightdn@bright.net

Mike,

I still am waiting for July?? to arrive, I'm not very hopeful at this point but if you have a source let me know. BTW am I really the last one?? XYL is tired of hearing me ask "did it come today??"

Dean

--

N2TNN's "HAM IT UP" 30 FT Cabin Cruiser via Barnegat Bay, New Jersey
FN20RM, Somerset, NJ /// 10 meter MARINEMOBILE /// 40 M
QRP/MARINEMOBILE
QRP/WAS- MI,MO,WI
MARINEMOBILE/WAS- MA,VA,OH,CT,TN,
NJ-QRP#36, NORCAL#1239, QRP-L#560, QRP-ARCI#9232, Knightlites, NEQRP,
CQC

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Steve O'Lear" <solear@tir.com>
Subject: [1981] solar panel
Message-ID: <01BB8001.7901BBE0@an103.tir.com>

Hi all,=20

I've been listening for a while now and recently ran across a problem =
that has me stumped any help would be appreciated.

I wanted a cheap solar panel to power my qrp home brew rigs and to =
charge up a gell cell. Jameco had one advertised for \$24.95. A nice 12 =
inch by 12 inch glass panel, rated over 20 volts open circuit, and about =
14v @ about 350ma under load! Wow, how could I loose?

Wellllll, you may have guessed it. All I got was a glass panel, no =
leads, no solder pads, no instructions. The thing looks silvered on one =

side (thats the solar stuff) and the back appears to be plain glass. I have poked around with a meter and the thing does put out a couple of = millivolts if I place the meter leads in the right places. The active = surface seems to be divided into two columns of 30 narrow rectangles = each and they all seem to be connected electrically (little or no = resistance as measured on the meter). The perimeter of the entire panel = looks like it is the other terminal.

Has anyone seen a similar situation or solved this puzzle before?

72/73 Steve
KC8APA
solear@tir.com

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Glen Leinweber <leinwebe@mcmail.cis.mcmaster.ca>
Subject: [1945] Soldering Aluminum
Message-ID: <1996Aug01.121858-0400@[130.113.234.7]>

A recent thread here suggested that aluminum could be soldered using various types of fluxes and solders. Just (by accident) came across a letter in an old QST about this subject, saying its not a good idea.

Its mighty difficult to get thru the oxide that coats ALL aluminum, so that the solder can wet it. That's the job of the flux, and there are fluxes that can break through aluminum oxide. That's not the only problem...once you have an aluminum/solder joint, it breaks down from galvanic reaction. So over time, what looks like an OK joint gets weak, and possibly resistive.

I'm not saying it can't be done successfully, but its tricky, requiring knowledge of the grade of aluminum (2S, 3S and 4S are OK).

For structurally strong joints, don't do it: inert-gas welding is the alternative.

Some data from "SOLDER...its fundamentals and usage", Clifford L. Barber, Kester Solder company, 1965

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Mike Rhodes" <weightdn@bright.net>
Subject: [1975] Spare March Issue of QRPp ??

Message-ID: <199608020035.UAA20606@brutus.bright.net>

Looking for someone who has an extra copy of the March '96 issue of QRPP.
Contact me direct with availability and price.

Tnx and 72 de Mike / W8DN
weightdn@bright.net

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [1958] Stories
Message-ID: <Pine.OSF.3.91.960801135637.11712A-100000@saturn.acs.oakland.edu>

On Thu, 1 Aug 1996, Gary Surrency wrote:

> I got my start in ham radio when I was 10 years old by a ham who
> was a TV repairman in my home town. He was W4SLF, a silent key now,
> but a dear friend to me for many years. I'm sure some of you have
> similar stories.

Yes, and given the current state of the bands and QRP-L, we should share a few.

As a spankin' new novice, one of my top priorities was to get some QSL cards printed up. There was this ancient print shop located near me so I hopped on my bicycle and peddled over.

I showed a QSL card to the old timer who ran the place and he grinned saying he knew what they were but had not seen one in a LONG time. He then claimed to have been a ham back in the days of spark and had the callsign 8HI. For you youngsters, hams were not given prefixes until after WWI.

He recalled how a lot of amateurs thought he was a bootlegger because his call had "HI" in it, which he explained to me, was the telegraphic equivalent of a laugh.

He then said his shop was not able to print a card like that and suggested I take it to another place down the road. That was the last I saw of the OM. It pains me now, as an older/wiser ham, not to have gone back with a pot of coffee and asked him to share some stories of the days of spark.

73 =paul= wb8zjl

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: mvjfm@mvubr.att.com
Subject: [1938] SWL 30-40 fix
Message-ID: <199608011505.LAA20719@alig1.att.att.com>

Early vintage SWL 30-40 transceiver kits did not show a couple of .001 uf capacitors on the pictorial component layout view.

Built only per the pictorial, the receiver had a loud hiss and signals were very weak.

I noticed empty component holes on the board.
After checking the schematic, and adding 2 missing parts, the receiver REALLY came to life.

Make sure there are no empty holes on your circuit board.
The schematic is correct.

Now, the little rig is a joy to use.

72 Jim W1FMR

.

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: burdick@interval.com (Wayne Burdick)
Subject: [1963] Thanks for your suggested improvements to test procedures
Message-ID: <v02130569ae26ced7b20b@[199.170.106.28]>

Paul,

Looks we're making progress. This is a very rational list of improvements.
Thanks for putting up with us nit-pickers :)

73,
Wayne

Paul wrote:

...

CHANGES FOR THE FUTURE:

1. I have the means to make good lab tests, because in part, I do it for a living. I also have the means to make hardcopies of oscilloscope and spectrum analyzer displays. All future lab tests will be fully documented via hard copies.
2. Lab tests will be sent to the designers for their review before posting. Any measurement they feel was made in error or does not represent typical performance can be discussed privately and worked out.
3. I am submitting an article to Doug Hendricks for publication in the next QRPp on how to make receiver performance measurements. It is not complete, but another article or two will follow.
4. I'll post the same information on QRP-L ... particularly to accompany lab tests when posted to QRP-L so complete definitions are provided.
5. Final versions of the lab tests will be provided to the NorCal webpage or whoever else wants to carry them for archiving.

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: cjsterl@ix.netcom.com (Craig J. Sterling)
Subject: [1931] TMPS update
Message-ID: <199608011022.DAA08519@dfw-ix7.ix.netcom.com>

Greetings from Washington, D.C,

TMPS Totals from May 1st thru July 31st:

Craig Sterling (AA3MD) cjsterl@ix.netcom.com
AA3MD TMPS 1996 Qs=213 States=41 Confirmed=20 DX=40
CT MA ME NH RI VT NJ NY MD PA AL FL GA KY NC SC TN VA AR LA MS NM OK TX
CA AZ OR MT WY MI OH IL IN WI CO IA KS MN MO ND NE
EW VE1-3 LZ G XE 9A HA VP9 DJ OZ EA1 EA8 OK I GM C6 HB SP YT ZL CY0 OM
3B8 PJ2 CM F HC HB0 OA UT TI GU SM OH KP4 PA CT TK 9H YV

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Phil Sikes" <psikes@whidbey.net>
Subject: [1927] TNX 40-9er help
Message-ID: <199608010557.WAA05177@islander.whidbey.net>

Thanks to the group, you came through again. I got the gif's that I needed and should have the 40-9er on the air in the next couple of days.

72 - Phil
Amateur Radio Station
KJ7NS
ARCI 9196:NWQRP 412:QRP-L 528
email: psikes@whidbey.net

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [1950] Transistor equiv (3!)
Message-ID: <199608011829.SAA20882@mail.enterprise.net>

OK I am still trying to sort this mess out!
Try under the Homebrew Corner, and it should be there. I do hope it works, please let me know, as I am not very up with all this html language!
Cheers.

--
Frank G3YCC
Ham Radio QRP Web Page:
<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: Dave.Ackrill@westwood45.powergen.co.uk
Subject: [1937] Typing Error?
Message-ID: <960801145226Z*/G=Dave/S=Ackrill/O=westwood45/PRMD=POWERGEN/ADMD=CWMAIL/C=GB/@MHS>

I hope that this was a typing error and not a Freudian slip!

I certainly hope you misunderstood the intent of comments of others regarding your tests and the posting of results to this list. I absolutely

would hate to think that all information, and any information,
relevant to QRP issues is welcome here on the list.

I was interested to see the message about using a 3 volt to 15 volt DC
- DC converter chip to power the 40-9er, as I'm hoping to build one of
these rigs soon. Does anyone know if there is a European equivalent,
or a source of these chips (at reasonable prices!) over this side of
the Pond please?

Having also seen a lot of postings regarding QRP field days and
activity days in the USA, I wonder if foreign entries are allowed? If
so, is there anyone else out there interested in operating at the same
time as some of these dates and sending in entries?

Does anyone have a "full" set of mods for the 40-9er for making the
rig less sensitive to the BCI we get over here? I've seen a couple of
notes regarding using tuned front ends, loosening the coupling, adding
audio amplifiers etc., but would be interested to get circuit diagrams
and any other mods that people have made. Thanks.

Finally, to the station asking for a lightweight, portable antenna,
try the half wave end fed described on the web page run by Frank
(G3YCC) at:-

<http://homepages.enterprise.net/g3ycc/>

I also mean to give this antenna a go when I've made the 40-9er.

72 de Dave (G0DJA)
dave.ackrill@powergen1.powergen.co.uk

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Dan Puckett <dpuckett@erinet.com>
Subject: [1977] Why do we do what we do?
Message-ID: <32018FEE.35EA@erinet.com>

Hey gang,

This question may reveal a certain amount of operating naivete but, how did the
40m QRP frequency get to
be 7.040? Or any of the other frequencies we use? The reason I ask is, over the
last year or so I have
read many of the gripes about QRO ops and data ops screwing up "our" frequencies.
On 80, 40, 15, and 10 there
is a relative safe haven just a few kc higher in the Novice bands.

This seems a good place for the QRP op to set up shop. There are several advantages. No data transmissions to deal with. Everybody can play. The Fox hunt would not have to bounce back and forth. The whole band runs lower power than the band as a whole.

As I said, This question probably reveals my naivete. I am sure there are some international conciderations. I just don't know what they are. Of course, most of this applies only to US hams. Is it a problem for others?

Equiring minds want to know. So do I. What's the poop?

72

Dan WD8AAU
dpuckett@erinet.com

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: svecbrdk@well.com (Lillian Svec and Wayne Burdick)
Subject: [1955] Your ideas requested for new QRP field minilog/reference
Message-ID: <199608011753.KAA09798@mh1.well.com>

To all lovers of things small,

Doug Hendricks created a very nice minilog a couple of years ago for NorCal. It was about 4 by 5 inches, spiral bound so it could lay flat, with 50 pages of log sheets. The log sheets were blank on the back, so you could conveniently take notes or doodle on the back of the previous page when logging. Another nice feature of Doug's log was that he included a wide range of useful reference material on QRP, like net times, QRP frequencies, etc.

The log is just the right size to fit INSIDE the Sierra lid, and it's a great size for backpack trips, car, or my cramped home station. It's the only log I use now. Trouble is, my two copies are just about filled, and there are no more!

I pleaded with Doug to print more than just that first small batch--which he bound himself--but he's too busy (I guess there's some evidence for this!). So Doug has agreed to let me update his design and try to get them printed out myself.

Here's what I'd like to know from my fellow QRPers:

1. Does this size log appeal to you, and if not, what other form-factors might make sense?

2. What sorts of reference information, QRP or otherwise, would you like to have included in the log? (I'll use the front inside cover and both sides of the back cover, just as Doug did.) So far, the reference material I'd like to put in includes the QRP frequencies, net info, a couple of URLs, the antenna length formula, and other tidbits.

But what would you like to see? What kind of information do you always find yourself hunting for either at home or in the field?

I'd appreciate whatever input you can give me, no matter how far out, although I'm afraid I can't include the entire text of the ARRL's DX prefix reference, etc. <hi> This is after all a *small* log book.

Thanks,
Wayne
N6KR

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: Kevin Muenzler <muenzlerk@uthscsa.edu>
Subject: [1942] RE: 1N1492 Diode
Message-ID: <01BB7F93.53FF9740@muenzlerk.uthscsa.edu>

On Thursday, August 01, 1996 9:08 AM, Edward J. Warhover[SMTP:kf9xy@apci.net] wrote:

>Pardon the bandwidth, but I am hoping that with all the knowledge on this
>reflector, someone can guide me in the right direction. I am in need of a
>1N1492 Silicon Diode. It is used in a Collins 30-L1 Amp. Does anyone know
>if it is still manufactured, or what the replacement might be.

>

>Tnx es 73,
>Ed KF9XY

This diode is a 600 PIV at 1 amp rectifier. It crosses directly to NTE117.

Hope this helps.

Kevin, WB5RUE

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [1956] RE: 1N1492 Diode
Message-ID: <Roam.3.0.838921906.4374.myers@bigboy>

> On Thursday, August 01, 1996 9:08 AM, Edward J.
> Warhover[SMTP:kf9xy@apci.net] wrote: >Pardon the bandwidth, but I am hoping
> that with all the knowledge on this >reflector, someone can guide me in the
> right direction. I am in need of a >1N1492 Silicon Diode. It is used in a
> Collins 30-L1 Amp. Does anyone know >if it is still manufactured, or what
> the replacement might be. >
> >Tnx es 73,
> >Ed KF9XY
>
> This diode is a 600 PIV at 1 amp rectifier. It crosses directly to NTE117.

I suspect a 1N4005 would also be more than adequate, and perhaps cost less than an NTE part ;-)

Dana KK6JQ
Dana@Source.Net

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Stanley Wilson <microres@crl.com>
Subject: [1959] Re: 1N1492 Diode
Message-ID: <Pine.SUN.3.91.960801105319.22926A-100000@crl13.crl.com>

Use a 1N4005 as a replacement according to the Motorola data book.

de stan ak0b

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Bob Hirsch" <bobh@p3.net>
Subject: [1962] Re: Envision DTP
Message-ID: <199608011942.PAA05697@p3.net>

> Hi gang,
>
> Here we go again with the flattery! I know this ain't the list for software
> info, but as I've said before, it IS the most helpful list on the net.
>
> Trying to contact the publishers of "Envision Publisher", a company called

> Software Vision Corporation originally in Tampa I believe. They had an agent
> over here in the UK called Transend who also seem to be not contactable. "EVP"
> is a GUI based desk top publisher that runs under DOS and was distributed in
> about 1993 in the form of a shareware diskette, with the usual invites to send
> more money for the FULL super duper all singing version.
>
> I am loath to part with money to a company and address that may or may not exist
> now. Anyone out there know their whereabouts, or have a registered copy they no
> longer use and may wish to trade ?
>

Hi Mel --

Here's the info you asked for:

JULIAN ACHIM

SOFTWARE VISION CORPORATION
PO BOX 1734
PINELLAS PARK , FL 34665

Telephone:

901-754-7695

Compuserve:

70304,64

Email:

70304.64@compuserve.com

He's still in business. Transend, the UK rep is out of business.
You can contact the company directly in Florida (he takes credit
cards) and talk to Julian or
you can deal with the new UK rep:

Atlantic Coast

Toll free # 07000

phone # BUY MEE

phone # 1297552222

fax # 1297553366

I'm not connected with the company at all, I just tracked it through
the Internet. We have to keep our fellow hams across the pond happy!

Good Luck

=====
73 de Bob, AA30N

No Code, No HF....Know Code, Know HF!

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: k7yha@juno.com (richard h. arland)
Subject: [1973] Re: Lab test postings
Message-ID: <19960802.000622.4447.1.k7yha@juno.com>

On Wed, 31 Jul 1996 23:14:39 -0700 Doug Hendricks <ki6ds@mail.telis.org> writes:

>This is an open letter to Paul Harden. Please continue to post the
>lab test results. I am very appreciative of the time and effort that
goes
>into the posting by everyone on this list. I may not agree with every
>posting, but I want to see it for myself and make my own decisions. I
>also want the opportunity to learn, which I have done a lot of from
>postings on this list. 72, Doug, KI6DS
>

I MUST agree with Dougie. Keep posting the lab results, Paul. I know for a fact that the ARRL lab results on my Sierra and NC-40A were suspect with an MDS in the -130dB range....the chip won't go that low. Which proves that even the "big boys" can misinterpret data or misread a dial calibration.

72 rich K7YHA

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: burdick@interval.com (Wayne Burdick)
Subject: [1968] Re: Lab Test: Thanks for the detailed description...
Message-ID: <v0213056fae26e8e0cff4@[199.170.106.28]>

Paul,

The description of your filter measurement procedure makes even more interesting reading than the test results themselves. Thanks, I appreciate your efforts.

As for the readings you got on the two '40As, those figures are very similar to what I've measured myself, and only a little worse than the ARRL's "really good day". I guess the fact that you have two sets of numbers that jive means that we're on the road to satisfying your new requirement of not settling for just one sample :)

Thanks again,

Wayne
N6KR

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Gary Surrency <gsurrenc@ix.netcom.com>
Subject: [1925] Re: Lab Tests
Message-ID: <32003AD7.2B54@ix.netcom.com>

Paul Harden wrote:

>
> Wayne and others,
> Regarding my lab tests ...

-----SNIP-----

> I will
> cease posting any further lab tests to QRP-L. I apologize if you
> interpreted the lab tests as a personal attack on you or the
> other designers.

C'mon guys, lighten up. I found the info of great interest. And if there are differing views on the results and/or methods of testing, GOOD! It will spawn even more discussions on these topics and all of us will learn by these examples what methods are available in testing. Maybe we can even come to some kind of "standardization" on spec'ing a rig's performance that will be of benefit to everyone.

Paul, thanks for the info you posted. I appreciate the time you took to do this and write it up for the list. Keep it coming! :-)
This IS a technical group, and we all should contribute if we are to continue the advancement of radio designs.

Waiting for more most excellent reviews,

--

Gary, AB7MY QRP-L #571 Chandler, AZ (near Phoenix)Grid Square DM43BH

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: svecbrdk@well.com (Lillian Svec and Wayne Burdick)
Subject: [1947] Re: Lab Tests: Fine, but please answer my original questions

Message-ID: <199608011701.KAA29953@mh1.well.com>

Paul,

Your response to me was so tangential to most of my original posting that I almost didn't recognize it:

- (1) I did NOT suggest that you don't post test results, which are obviously an important service to the readers of this list;
- (2) I did NOT suggest that you were intentionally trying to belittle anyone's design;
- (3) I did NOT try to engage you in a discussion of the merits of one bandwidth or another.

The bulk of my message contained just two simple questions, which you ignored:

- 1. What test setup and procedure did you use for measuring crystal filter bandwidths that you reported for the Explorer II?
- 2. Did you have the AGC ON or OFF?

My contention, now as before, is that your reported results of "1 to 3kHz" -6dB bandwidth for the Explorer II's crystal filter may be in error, based on my experience sweeping many such filters, which typically have bandwidths of 300 to 500Hz at -6dB even without hand-picking of the crystals. You've posted similiarly unbelievable figures for other rigs with low I.F.s, including the original NC40.

We need to settle the AGC question for the benefit of both readers and authors of future rig tests. Leaving the AGC ON renders any filter measurements useless because these rigs have wide-range AGC. 4-pole filters of the type used do not have steep skirts or great shape factors, so the use of AGC will dramatically affect the bandwidth measurements.

Let's save the emotional diatriabes for code vs. no-code and the like. If you'll kindly answer my questions we can then all get on with testing and using the rigs and be that much wiser. Ideally we can re-post corrected test results for the filters in question.

As for the transmitter efficiency questions, thank you for the clarification.

73,
Wayne

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Paul Harden <na5n@Rt66.com>
Subject: [1966] Re: Lab Tests: Fine, but
Message-ID: <199608012103.PAA05529@Rt66.com>

Wayne and others,

The test equipment and setup used for doing the lab tests is what is used to plot the shape factors and gain distribution profiles of our IF filters at the observatory. A sweeping signal generator with power meter is used, which is adjustable to -60dBm. Fixed and step attenuators take it down to -150dBm. This is applied to the antenna connector with a 50 ohm termination.

A spectrum analyzer is connected to the filter output, which on most rigs is the MC1350 input. I usually use -90dBm (7uV) input to the antenna to correspond to an approximate S5-S6 signal strength and set a marker cursor on the spectrum analyzer to show the magnitude of the IF - usually in the order of -60 to -70dBm at this point. The signal generator is varied +/- 6dB to observe an appropriate 6dB change of the IF on the spectrum analyzer to verify no gain compression is occurring in the NE602 RX mixer. I'll set the second marker cursor for 6dB below the first on the display. (In reality, I adjust the generator output so its peak falls on a graticle line, and set the spectrum analyzer for 6dB per division, so I can use the markers for the frequency readout).

If I'm using the sweep generator, the tracking generator on the spectrum analyzer is used to control the sweep frequency on the signal generator to "paint" the filter profile. The frequencies associated with the two -6dB cross-overs is recorded (and displayed on the CRT). This method is particularly valuable for seeing the actual skirts (shape factor) and the degree of USB rejection, in addition to ringing effects some crystal filters exhibit.

If using a manually tuned signal generator, the output of the generator is moved above and below the reference test frequency for the two 6dB drops in IF level and the two frequencies recorded to determine the overall bandwidth. This method does little to represent the filter shape.

By using a spectrum analyzer on the filter output, it is measured before gain stages effected by the AGC, and thus isolated from the AGC. Your concerns about AGC are, of course, absolutely correct. In most MC1350/NE602 rigs, the AGC's are so hot, the MC1350 never sees much more than 20dB gain anyway. This would make any measurements made past the MC1350 absolutely worthless. On the

MFJ rigs, for example, you can adjust the final IF "can" its full travel and never see a wiggle on the audio output due to such a huge dynamic range of the AGC. This renders any measurements at the audio output useless once the AGC threshold is reached (which for most rigs ain't much above the noise!) Measuring the MDS by monitoring the audio output even needs to be done to ensure the AGC voltage does not change.

Doug Hendricks visited the observatory and saw the test bench where I've done most of these tests (and played around with a couple of radios while there -hi). I had given him photocopies of some of the spectrum analyzer displays on 2 different NorCal 40a's (to give to you). As I remember, both were in the vicinity of -130dBm MDS and an IF filter BW of 400Hz, perhaps a bit less. Both rigs also sounded great on the air. I would like to post those results to QRP-L upon your review, with any commentary you'd like to add.

72, Paul NA5N

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: etxanos@kk.ericsson.se (ETX-B-E Ostlund Anders)
Subject: [1929] Re: logging programs
Message-ID: <9608010744.AA16125@kk347.ericsson.se>

>
> Is there any place on the internet that I can download a logging program?
> Fancey would be nice but not necessary. One that would work off of windows
> 95 would be super! I've looked but have not found.

>
> Jerry- NR5A

>
>
Hi Jerry,

Take a look at:

<ftp://ftp.funet.fi/pub/ham>
<http://hamster.ivey.uwo.ca/~amsoft>
<http://www.hosenose.com/~pda>

72 de Andy - SM0THU
<http://www.geocities.com/CapeCanaveral/2773>

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: [1932] RE: logging programs
Message-ID: <32695.owen@apollo.eeel.nist.gov>

In message Wed, 31 Jul 1996 20:26:57 -0600 (MDT),
Jerry <jfelts@rapidcity.com> writes:

> Is there any place on the internet that I can download a logging program?
> Fancey would be nice but not necessary. One that would work off of
> windows 95 would be super! I've looked but have not found.

>

> Jerry- NR5A

>

You can find many, many programs logging and otherwise on the SimTel repository via FTP. To get to it do "ftp ftp.coast.net" then change to the directory "simtel/msdos/hamradio". Find the file you want and then do "get filename" be sure to change the mode to binary before you do the "get" by typing binary then do a return. You can also download the entire simtel zipped file and unzip it and have all the file descriptions on your computer so if you in the future need a program all you have to do is check the list to see if it's in the simtel repository. 73 Jim K4CGY qrp-1 #72

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: talljazz@teleport.com (Dan Presley)
Subject: [1930] Re: Mac Logging Software
Message-ID: <v01530502ae26114675d3@[206.163.120.78]>

I'd be very interested in your program as I'm a "mac" guy-bring it on!
Dan N7CQR

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Dale Anderson <dalea@artemis.fc.hp.com>
Subject: [1943] Re: MFJ is on the WWW where?
Message-ID: <199608011552.AA235214772@artemis.fc.hp.com>

>The MFJ rep has posted a message each day for about a week now over on
>Compuserve announcing that MFJ is now on the WWW. Unfortunately he has not
>posted the URL (address) and seems to ignore all questions asking for it.

>

>Anybody found their brandnew page yet?

Yup, found it in about 2 seconds using a WEB crawler.

The URL is: <http://www.cqinternet.com/mfj.htm>

Regards,
-Dale

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: Dale Anderson <dalea@artemis.fc.hp.com>
Subject: [1944] Re: MFJ is on the WWW where?
Message-ID: <199608011609.AA272115763@artemis.fc.hp.com>

> Yup, found it in about 2 seconds using a WEB crawler.
>
> The URL is: <http://www.cqinternet.com/mfj.htm>

Well, that'll teach me not to take a WEB crawler's data
at face value. I just checked out the URL. I don't
think it actually belongs to MFJ but is instead someone's
page providing contact data on MFJ.

Sorry about the confusion.

-Dale

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: [1955] RE: Need help locating SBL-1.
Message-ID: <52649.owen@apollo.eeel.nist.gov>

In message Wed, 31 Jul 1996 08:31:35 -0700,
amarriot@direct.ca (Albert Daniel Marriott) writes:

> Hi,
>
> QST Aug/95 issue has an article about a xtal receiver which uses a part I
> cannot locate: Mini Circuits SBL-1 diode mixer.

>
Ocean State Electronics
P.O. Box 1458
6 Industrial Dr.
Westerly, RI 02891
1-800-866-6626

SBL-1 \$7.95

72/73 Jim K4CGY QRP-L #72

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: rcrampton@gtc.itt.com
Subject: [1961] Re: Need help locating SBL-1.
Message-ID: <201015c0@gtc.itt.com>

You can buy direct from Mini-Circuits. Their phone number is
718-934-4500. They accept Visa and American Express. The SBL-1 is a
good mixer, pretty popular in HAM stuff, and sells for < \$5 from the
factory.

Good luck,

Ray Crampton, KN4SK

rcrampton@gtc.itt.com
ITT-GTC, RFIC Design

----- Reply Separator -----
Subject: Need help locating SBL-1.
Author: amarriot@direct.ca at Internet
From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [1965] RE: Need help locating SBL-1.
Message-ID: <2.2.32.19960801195844.00976a50@public.compusult.nf.ca>

Hi Jim,

I was wondering if you (or any one on the list) know if Ocean State
Electronics has a recent catalog. I tried a few months ago and got no where
- so I was wondering how they are doing. I keep seeing the name come up.
The 800 number is NG in Canada so I wonder if anyone knows of their direct
number.

By the way -

Dan's Small Parts
Box 3634
Missoula, Montana 59806-3634
1-406-258-2782

has SBL-1 for \$6.50

Cheers 73/72 Bob V01DRB/WA6eRB

as At 14:37 8/1/96 -0400, you wrote:
>
>> QST Aug/95 issue has an article about a xtal receiver which uses a part I
>> cannot locate: Mini Circuits SBL-1 diode mixer.
>>
>Ocean State Electronics
>P.O. Box 1458
>6 Industrial Dr.
>Westerly, RI 02891
>1-800-866-6626
>
>SBL-1 \$7.95
>
>72/73 Jim K4CGY QRP-L #72
>

```
-----
| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet: rgobrick@nfld.com |
| Compuserve: 70466.1405@compuserve.com |
|-----
```

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: k5zty@hamgate2.w5-f6cnb.ampr.org
Subject: [1980] re: QRP mini log books
Message-ID: <11066@sugarland.ampr.org>

Sounds like a great idea to me. Reminiscent of the old ;mobile log
books crossed with the QRP data book. I'll take two when the're ready.
72,
Bill, K5ZTY

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996

From: Monte Stark <ku7y@sage.dri.edu>
Subject: [1933] Re: Rig Tests
Message-ID: <Pine.SUN.3.90.960801070415.10424A-1000000@vortex.sage.dri.edu>

Paul,

Keep up the tests!

If you use the same standards for all rigs, then the numbers
have good meaning!

And to the one that said he wished he had all that nice equipment;
I just wish I knew how to use it!

cul,

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: torell@sicom.com (Kent Torell)
Subject: [1957] Re: Soldering Aluminum
Message-ID: <v02130501ae26a36f2a34@[192.91.202.41]>

>Just (by accident) came across a letter in an old QST
>about this subject, saying its not a good idea.

A post appeared this am on the Glowbugs list from Barry Ornitz detailing
the same thing. He also had some experiences to relate, regarding the
very short lifetime of these joints. I've asked him to cross-post to
this list.

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260

From owner-qrp-l@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [1954] Re: Tor.zip
Message-ID: <199608011856.SAA23829@mail.enterprise.net>

As I haven't hit on the way to put this thing on so you can down load it,
I have deleted it. When I can find a way to do it, I'll try again!

--

Frank G3YCC
Ham Radio QRP Web Page:
<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: "Bob Hirsch" <bobh@p3.net>
Subject: [1952] Re: Typing Error?
Message-ID: <199608011707.NAA00708@p3.net>

>
> I hope that this was a typing error and not a Freudian slip!
>
> -----
> I certainly hope you misunderstood the intent of comments of others
> regarding
> your tests and the posting of results to this list. I absolutely
> would hate to think that all information, and any information,
> relevent to QRP issues is welcome here on the list.
> -----
>

Yup. Just a typo. Should have read "I absolutely would hate to
think that all informantion, and any information, relevent to QRP
issues is *not* welcome here on the list.

Thanks.

=====
73 de Bob, AA30N

No Code, No HF....Know Code, Know HF!

From owner-qrp-1@lehigh.edu Thu Aug 1 23:12:17 1996
From: k7yha@juno.com (richard h. arland)
Subject: [1972] Re: Your ideas requested for new QRP field minilog/reference
Message-ID: <19960802.000622.4447.4.k7yha@juno.com>

On Thu, 1 Aug 1996 10:59:48 -0800 svecbrdk@well.com (Lillian Svec and
Wayne Burdick) writes:
>To all lovers of things small,

.So Doug has agreed to let me update his design and try to get
>them printed out myself.

Great idea....press on.

>Here's what I'd like to know from my fellow QRPers:
>1. Does this size log appeal to you, and if not, what other form-factors
>might make sense?

The size is perfect. >

>2. What sorts of reference information, QRP or otherwise, would you
>like to have included in the log? (I'll use the front inside cover and
both
>sides of the back cover, just as Doug did.)

CHU time station freqs (7.333, etc since these are normally with in the
range of most ham receivers)

Local time to UTC conversion, either map, TZ + to UTC addition, etc. AND
a list of which states and
Canadian provinces are on Standard time when EVERYONE else in N. America
is on Daylaight time!

So far, the reference material I'd like to put in includes the QRP
frequencies, net info, a couple of
>URLs, the antenna length formula, and other tidbits.
>

>But what would you like to see? What kind of information do you
>always find yourself hunting for either at home or in the field?

Ever wonder where the "new" WARC bands start and where the CW and phone
segments are?
A small band/segment chart would be nice.

How about laminating the covers to reduce wear and tear PLUS offer some
protection from the wet?

72 rich K7YHA